## Stormwater Pollution Prevention Clean Water: Our Only Choice

Rutherford County has one drainage system: the storm drains. The storm drain system was designed to prevent flooding by carrying excess rainwater away from streets, homes, and businesses. Because the system contains no filters, it also serves the unintended function of carrying urban pollution straight into our streams.

This pamphlet series tells you how to prevent pollution from entering our streams from stormwater or "urban runoff". Rain, industrial and household water mixed with urban pollutants creates stormwater pollution. The pollutants include oil and other automobile fluids, paint and construction debris, yard and pet wastes, pesticides, and litter. Urban runoff pollution flows to our streams through the storm drain system that takes water and debris straight from the streets to our streams.

Each day tremendous amounts of polluted urban runoff enters our streams untreated, leaving toxic chemicals in our water sources and tons of trash along their banks. Urban runoff contaminates our streams and rivers, harms aquatic life and increases the risk of flooding by clogging our storm drains and catch basins.

Overall, storm water pollution costs us millions of dollars each year. These Best Management Practices (BMPs) will ensure cleaner streams and rivers, and a cleaner Rutherford County. For stormwater information, call Rutherford County Engineering Office at 898-7732 or visit stormwater.rutherfordcountytn.gov.

Rutherford County Stormwater Department 1 South Public Square, Suite 200 Murfreesboro, TN 37130 Contact us to help improve our county!

#### **Hazardous Spill Response**

Rutherford County Fire Department (615) 890-7550 or 9-1-1

## Recycling and Household Hazardous Waste Disposal

Rutherford County Extension Office (615) 898-7710

#### **To Report Illegal Dumping**

Rutherford County Codes Department: (615) 898-7734 Rutherford County Engineering Office: (615) 898-7732

#### To Report a Drainage Problem

Rutherford County Engineering Office (615) 898-7732

This brochure is one of a series of pamphlets describing storm drain protection measures. Other pamphlets include:

- Landscaping, Gardening and Pest Control
- Food Service Industry
- Automotive Maintenance and Car Care
- Heavy Equipment & Earth Moving Activities
- Detention Pond Maintenance

Home repair or remodeling that includes electrical, plumbing or an addition to your home requires a permit. Please contact Rutherford County Building Codes. For more information or assistance, call, email or write:

Tennessee Small Business Environmental Assistance Program 8th Floor, L&C Annex, 401 Church Street Nashville, TN 37243-1551 1-800-734-3619

BGSBEAP@tn.gov

tn.gov/environment/program-areas/ sbeap-small-business-environmental-assistance.html

## Rutherford County Stormwater **Best Management Practices**



# **Heavy Equipment and Earth Moving Activities**

For Site Supervisors; Bulldozer, Backhoe & Gardening Machine Operators;
Dump Truck Drivers; General Contractors; Home Builders and Home Developers

### **Heavy Equipment Operation Problems**

Soil excavation and grading operations often contribute to urban runoff pollution. By loosening large amounts of soil and sediment, earth-moving activities can cause sediment to flow into gutters, storm drains and into our streams.

Sediment is the most common pollutant washed from work sites, creating multiple problems once it leaves the work site. Sediment clogs the gills of fish, blocks light transmission and increases water temperature, all which harm aquatic life. Sediment also blocks gutters and storm drains increasing the risk of flooding in areas downstream of the work site.

Sediment also carries with it other work site pollutants such as pesticides, cleaning solvents, cement wash, asphalt, and car fluids like motor oil, grease and fuel. Thus, poorly maintained vehicles and heavy equipment leaking fuel and oil at the construction site also contribute to storm water pollution.

#### **Land Disturbance Permits**

Rutherford County requires that a individual contact the Office of Planning & Engineering prior to beginning any land disturbing activity unless the activity is covered by the Tennessee Right to Farm Act or involves home landscaping or gardening. This permit requires individuals to develop and implement an erosion control plan. For more information, contact Rutherford County Office of Planning and Engineering at (615) 898-7732.

#### **Solutions**

Best Management Practices, such as handling, storing and disposing of materials properly can prevent excavation site pollutants from entering storm drains.

#### 1. General Business Practices

- Schedule excavation and grading work for dry weather.
- Use as little water as possible for dust control.
- Obtain a copy of the Tennessee Erosion and Sediment Control Handbook, July, 1992, available from the Tennessee Department of Environment and Conservation.
- For site specific guidance or any questions you may have regarding erosion control please call the Rutherford County Engineering Department.
- For local construction site inspection, call Rutherford County Engineering Department at 898-7732.

#### 2. Clean Up Spills

Never hose down "dirty" pavement or impermeable surfaces where fluids have spilled. Use dry cleanup methods (saw dust, cat litter and/or rags).

Sweep up dry materials immediately. Never attempt to bury them or "wash them away" with water.

Clean up spills on dirt areas by digging up and properly disposing of contaminated soil.

Report significant spills to the appropriate spill response agencies immediately. Use the telephone numbers provided on the back of this pamphlet.

### 3. Vehicle and Equipment Maintenance

- Maintain all vehicles and heavy equipment. Inspect frequently for leaks.
- Conduct all vehicle/equipment maintenance and refueling at one location—away from storm drains.
- Perform major maintenance, repair jobs off-site.
- Use and maintain gravel construction entrances where truck traffic is frequent to reduce soil compaction and limit tracking of sediment into streets.

- Use drip pans or drop cloths to catch drips and spills, if you drain and replace motor oil, radiator coolant or other fluids on site. Collect all used fluids, store in separate containers and recycle whenever possible.
- Do not use diesel fuel to lubricate equipment or parts.

#### **4. Erosion Prevention**

- After clearing, grading or excavating, exposed soil poses a clear and immediate danger of storm water pollution.

  Re-vegetation (permanent or temporary) is an excellent form of erosion control for any site.
- Avoid excavation and grading activities during wet weather.
- Inspect your erosion control installations after every rain and at least twice a week or after a half inch rain event.
- Construct diversion dikes to channel runoff around the site. Stabilize channels with grass or other material. Place small check dams or rip rap in channel to reduce runoff velocity.
- Cover stockpiles and excavated soil with secured tarps or plastic sheeting.
- Remove existing vegetation only when absolutely necessary. Large projects should be conducted in phases.
- Consider planting temporary vegetation for erosion control on slopes or where construction is not immediately planned.
- Plant permanent vegetation as soon as possible, once excavation and grading activities are complete.